EE / CprE 492 sdmay23-26

Mini-Arcade Cabinet

Client : Brad Yenger
Advisor : Mathew Wymore
2-2-23 to 2-17-23

Team members:

Brad Yenger (EE)
- soldering experience, 3D CAD design, carpentry skills, along with project experience
Liam Tureaud (EE)
-Soldering experience, carpentry, PCB design, electrical work
Alexander Glass (SE)
-Capable coding in Java, HTML, JavaScript, willingness to learn a new skill during the course of this project
David Helmick(SE)
-Worked with many different computer programming languages in many different aspects (simple games, UIs, websites, embedded systems, databases, etc.). Taken both CprE and SE courses so I have lots of knowledge about computers from a hardware and software perspective.
Jeffrey Marsh(SE)
-pretty talented programmer also well versed in video game emulation
Mark Gores(SE)
-proficient in multiple coding languages. Good understanding of operating systems. Good understanding of computer engineering.

Past two weeks accomplishments:

Liam Tureaud - Finished the design for the LED array and created a Bill of materials needed for the full project.

Bradley Yenger - Finished the KiCad circuit for the power button. Ordered all parts needed for the power circuit and for the LED array. Wrote the by-weekly report.

Mark Gores - Installed a program called qjoypad to completely map all controllers. Mapped both the retro controller and xbox controller and saved the setup. Began work on setting this app to

boot on startup. He also was the first to control a game using both the retro arcade controls and the xbox controls.

Alexander Glass - Has attended the meeting with ideas for setting up the code. Has begun planning for the eventual merge of the code to run the games and UI.

Jeffery Marsh - Created a UI with several different pages. A setting page and a game page are accessible and run on the Raspberry Pi. He was the first to successfully get a game to run on the Pi using the keyboard (Burger time was the game)

David Helmick - Has begun the coding process for uploading a game via USB stick into the pi remotely. He has also helped in finding a way to get the controls mapped using a website that responds with different feedback depending on the button presses vs what the computer interprets it as.

Pending Issues:

Orders were delayed because Brad waited to place the order. It is ordered now and taken care of.

Name	Hours worked these weeks	Total hours
Liam Tureaud	6	22
Brad Yenger	7	23
Mark Gores	8	24
Alexander Glass	6	22
Jeffery Marsh	8	25
David Helmick	7	23

Next plan of action:

(Jeffery and Mark) We plan on merging the controller mapping code and the UI. Both will start on bootup, and the UI should be able to control the mapping and reroute any keystrokes.

(Liam) With parts ordered, we plan on soldering up the LED array and testing it.

(Brad) With parts ordered, we plan on soldering up the power supply.

(Alexander and David) With parts ordered, we plan on testing how we will be able to upload games using a USB hub.